

CLAIMS

What is claimed is:

1. In a data processing system having a CPU, a non-volatile read/write memory device in the CPU's address space, and at least one other device further having read/write memory in the CPU's address space, a method for executing an instruction stream using the read/write non-volatile memory device comprising:

- (a) retrieving an instruction from said non-volatile read/write memory device;
- (b) determining if said retrieved instruction is a write instruction;
- (c) executing said retrieved instruction if said retrieved instruction is not a write instruction;
- (d) loading instructions into memory mapped into said CPU's address space that is not in said non-volatile read/write memory device needed to carry out the write operation of said retrieved instruction, if said retrieved instruction is a write instruction;
- (e) executing said loaded instructions, carrying out said write operation on said non-volatile read/write memory device thereby;
- (f) returning to execute from said non-volatile read/write memory device by pointing to an instruction that corresponds to the next instruction to be executed after carrying out said write operation on said non-volatile read/write memory device, and continuing with step (a) until there are no more instructions to execute.